UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/561,481	04/03/2006	Arja Lehtinen	04150.0025U1	8232	
23859 7590 08/19/2009 Ballard Spahr Andrews & Ingersoll, LLP SUITE 1000			EXAMINER		
			KRUER, KEVIN R		
999 PEACHTREE STREET ATLANTA, GA 30309-3915			ART UNIT	PAPER NUMBER	
				1794	
			MAIL DATE	DELIVERY MODE	
			08/19/2009	PAPER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Commence	10/561,481	LEHTINEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	KEVIN R. KRUER	1794				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 26 M	av 2009					
,—	action is non-final.					
	,—					
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <i>1-7.10.13 and 14</i> is/are pending in the	4)⊠ Claim(s) <u>1-7,10,13 and 14</u> is/are pending in the application.					
,	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-7,10,13 and 14</u> is/are rejected.						
7) Claim(s) is/are objected to.						
• • • • • • • • • • • • • • • • • • • •	8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>21 December 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
·—	a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08)  5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/561,481 Page 2

Art Unit: 1794

#### **DETAILED ACTION**

### **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-7, 10, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable o Helland (WO03/066699A1 or US 7,256,239) in view of Fuerholzer (US 3,616,191). Herein, citations are provided for only the WO document since the disclosures are identical.

Helland teaches a film of a polyethylene produced by polymerization catalyzed by a single site catalyst and comprising as comonomers to ethylene at least two C4-12 alpha olefins, preferably butene and hexene (Abstract). The film is preferably a bimodal polymer comprising a low molecular weight and a high molecular weight fraction (see page 7). The low weight fraction polymer comprises a binary copolymer of ethylene and butene and the high weight fraction is a binary copolymer or terpolymer. The MWD is preferably 3-8 (first line, page 8), MFR may be 5g/10min and the density is from 905-930g/10min (page 10, lines 1-12). The composition may further comprise LDPE in

amounts up to 30wt% (page 11, lines 11+). The composition may be applied to a single or multilayer substrate (page 2, lines 6+; page 6, lines 12+) and used as a heat seal film. The substrate may comprise polyamide, or the like (page 6, lines 16+). The polymer may be produced in a two-stage process comprising a loop reactor followed by a gas phase reactor.

With regards to the heat sealing force of claim 7, said limitation is herein understood to be inherent to the heat seal composition taught in Helland since it is compositionally identical to the claimed invention.

Helland does not teach the film may be applied to a paper substrate. However, Fuerholzer teaches polyolefin heat sealable compositions have traditionally been applied to paper substrates in packaging embodiments (see background of the invention). Thus, it would have been obvious to the skilled artisan at the time the invention was made to apply the film of Helland to a paper substrate. The motivation for doing so would have been to that such heat sealable compositions have traditionally been applied to paper substrates in packaging arts.

### Response to Arguments

Applicant's arguments filed 5/26/09 have been fully considered but they are persuasive to overcome the previous 102(a) rejection. However, the references do qualify as 102(e) references.

Applicant further argues Helland is directed to self supporting, not extruded films. Said argument is noted but is not persuasive because Helland teaches the film may be

Art Unit: 1794

co-extruded (col 1, lines 47+).extruded, or prepared using conventional film production techniques (col 3, lines 54+).

Applicant further argues Helland teaches the inclusion of LDPE in amounts up to 5wt%. The examiner respectfully disagrees and notes up to 30wt% LDPE may be added (page 11, lines 11+).

Applicant further argues the claimed invention exhibits increased line speed and allow for the use of higher melt flow rate polymers. Said arguments are noted but are not persuasive because unexpected results are not sufficient for overcoming an anticipation rejection.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN R. KRUER whose telephone number is (571)272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/561,481 Page 5

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin R Kruer/ Primary Examiner, Art Unit 1794